

AMENDMENTS TO THE CLAIMS

1-27. (Canceled)

28. (Currently Amended) An electronic device supporting both battery identification and communication of data over an interface between a battery and the electronic device, comprising:

a resistor having a resistance value;

a processor configured to calculate a resistance in the battery responsive to the resistance value and a voltage drop across the resistor, wherein the processor further determines whether the battery is capable of at least one of receiving and transmitting additional information based on the resistance in the battery; and

circuitry for enabling communication of data between the processor and the battery.

29. (Previously Presented) The electronic device of Claim 28 wherein the circuitry for enabling communication of data, comprises:

a transceiver for transmitting and receiving serial communication of data between the electronic device and the communications circuitry of the battery;

a first register for holding data to be transmitted by the transceiver; and

a second register for holding data received by the transceiver.

30. (Previously Presented) A method enabling both battery identification and communication of data over an interface between a battery and an electronic device, comprising the steps of:

attempting to communicate data to the battery from the electronic device via a serial connection responsive to a connection between the battery and the electronic device;

selectively switching a resistor in the electronic device between system voltage and a communications pin if the electronic device may not communicate data to the battery; and

determining a first resistance value in the battery responsive to the impedance in the electronic device.

31. (Previously Presented) An electronic device supporting both battery identification and communication of data over an interface between a battery and the electronic device, comprising:

- a current source providing a current value;
- a processor configured to calculate a resistance in the battery responsive to the current value and a voltage drop value at an input to the electronic device; and
- circuitry for enabling communication of data between the processor and the battery.

32. (Previously Presented) The electronic device of Claim 31 wherein the circuitry for enabling communication of data, comprises:

- a transceiver for transmitting and receiving serial communications of data between the electronic device and the communications circuitry of the battery;
- a first register for holding data to be transmitted by the transceiver; and
- a second register for holding data received by the transceiver.

33. (Canceled)

34. (Previously Presented) The method of claim 30, further including the step of attempting to communicate with the battery from the electronic device prior to the step of selectively switching.

35. (New) The electronic device of claim 28, wherein if the resistance in the battery is above a predetermined threshold, then the battery is a smart battery.

36. (New) The electronic device of claim 28, wherein if the resistance in the battery is below a predetermined threshold, then the battery is a dumb battery.